REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.116, are respectfully requested.

By the foregoing amendment, a copy of the Sequence Listing in computer readable form is hereby submitted as required by 37 C.F.R. § 1.821(e). The submission of the new Sequence Listing is in response to the Notice to Comply (copy attached), and thereby brings the specification in compliance with the requirements of 37 C.F.R. §§ 1.821-.825.

The amendments to the specification do not introduce any prohibited new matter. The amendments serve to more distinctly present the subject matter set forth in the application in view of the submitted Sequence Listing, as well as to correct certain typographical errors.

In the event that there are any questions relating to this response, or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Debbie Yellin
Deborah Yellin
Registration No. 45,904

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: April 13, 2001

Attachment to Amendment dated April 13, 2001

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Page 7, Paragraph Beginning at Line 10

Screening of cDNA Library - A bovine lung cDNA library constructed in a lgt10 vector (Clontech) was screened with the 108-bp PCR fragment as hybridizing probe. The nitrocellulose replicas of the library plaques were prehybridized in [6xSSC, 5xDenhart's] 6x SSC, 5x Denhart's solution containing 0.1% SDS and 0.1 mg/ml denaturated salmon DNA for 2 hours at 65°C. Hybridization was carried out at 42°C in the same solution containing ^{32}P-labeled probe for 16-18 hours. The filters were washed two times with 2x SSC, 0.5% SDS and two times with 0.5x SSC, 1% SDS at the same temperature. The library was repeatedly screened twice under the same conditions. Finally, the entire cDNA phage library was subjected to PCR amplification using the lgt10 forward and reverse primers (Clontech) with a epimerase cDNA specific primer (SEQ ID NO: 1) (5'-GCTGATTCTTTTCTGTC-3').

Attachment to Amendment dated April 13, 2001

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Page 16, Paragraph Beginning at Line 1

Table I
Peptide and primer sequences

A. N-terminal sequences of isolated C5-epimerase

1. PNDWXVPKGCFMA (SEQ ID NO: 2) (free solution)
2. PXDWTVPKGXF (SEQ ID NO: 3) (band excised from PVDF-membrane)

B. Peptide sequences

1. PNDXTVPK (SEQ ID NO: 4)
2. XXIAPETSEGXSLQL (SEQ ID NO: 5)
3. GGWPIMVTRK (SEQ ID NO: 6)
4. FLSEQHGV (SEQ ID NO: 7)
5. KAMLPLYDTGSGTIYDLRHFMLGIAPNLAXWDYHTT (SEQ ID NO: 8)

	primer 1 (sense)	primer 2 (sense)	primer 3 (antisense)

C. Primer[a]

			Degeneracy
1	(S)	5'-cc gaattcAARGCNATGYTNCCNTY-3'[b] (SEQ ID NO 9)	384
2	(S)	5'-cc gaattcGAYYTNMGNCAYTTYATG-3' (SEQ ID NO 10)	288
3	(AS)	5'-cc ggatccGTNGTRTGRTARTCCCA-3' (SEQ ID NO: 11)	32

[a] (R, A or G; Y, T or C; M, C or A; N, A or C or G or T)
[b] (cc, clamp; gaatcc, EcoRI restriction site; ggatcc, BamHI restriction site)

Page 18, Paragraph Beginning at Line 1

SEQUENCE LISTING (SEQ ID NOS: 12 & 13)